



## Background

Public health leadership can support sexually transmitted disease (STD) programs as they adapt to Affordable Care Act (ACA) implementation. ASTHO and CDC convened a meeting in Atlanta on Feb. 12, 2013, that included local, state, and federal public health experts and partners (see *Acknowledgements*). The meeting was designed to enhance leadership engagement and:

1. Provide an update on STD epidemiology, programs, and policies.
2. Facilitate dialogue between national and state leaders.
3. Exchange innovative ideas to address high priority issues.
4. Identify technical assistance needs and opportunities for leadership engagement.

This effort complements ASTHO's work on the [integration of public health and primary care](#) because STD programs are a case example of public health transformation. During this critical time, important decisions about health and healthcare will happen at the state level. States are transforming at different rates. Cuts in domestic discretionary funding will have an impact, and public health needs to make hard choices. In this meeting report, we outline opportunities for leadership engagement that promote core public health, with case examples specific to STD prevention. The opportunities in this report were identified by meeting presenters and participants and fall under four areas: partnerships, payment, workforce, and surveillance.

## Partnerships

### Overview

Public health needs nimble programs that can respond to emerging problems and focus on assessment, assurance, and policy development. With dwindling resources, public health is examining its approaches and priorities. This means focusing on activities with the greatest public health benefits and strengthening internal and external partnerships. Public health leaders can engage as experts in improving quality, help educate healthcare providers, and convene community stakeholders. Public health can also work with providers, such as community health centers, to design care models that work for the local community.



### Partnerships for STD Prevention

STD services have been primarily individual-based and in the public sector since the 1930s, but the majority of infections are no longer seen in public health STD clinics. As the population is moving toward the primary care network for STD services, public health has a critical role in providing health education and population-based prevention services and assuring quality and culturally appropriate safety net services for populations such as immigrants, the incarcerated, and those in communities without adequate providers. STD clinics are still needed, particularly in some urban, high volume, high morbidity areas. They need to be able to bill for their services and be seen as centers of excellence. STD clinics can market themselves as specialists that have something to offer in the health marketplace. For example, in Washington state, the only remaining STD clinic functions as a center of excellence and the other counties are working with community health centers to provide services.

The vast majority of STD cases are asymptomatic. Consequently, infected persons do not always access care, nor do their providers address risks. Also, a considerable number of primary syphilis cases are being misdiagnosed in the private sector. STD services can be scaled up in the primary care network, but not without collaboration between public health and primary care. Standards of care and a more comprehensive approach to sexual health are needed. When shifting STD services to the private healthcare sector, public health needs to ensure Disease Intervention Specialists (DIS) and partner services remain available. In addition, the new system needs the capacity to obtain cultures for gonorrhea and administer injectable medications for gonorrhea and syphilis.

Public health should consider opportunities to leverage capacity across shared interests, including STD and HIV programs. STDs increase the infectiousness of HIV, the infections have risk factors in common, and some populations are especially hard hit (syphilis and HIV rates are increasing among young black men).

The National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention's Program Collaboration and Service Integration initiative integrates services at the client level, and some states have gone further. There are opportunities for STD integration with other health department programs such as tuberculosis (the demographics may be different but there are efficiencies in staffing), family planning, and women's health. Internal integration relies on key individuals and also depends on the organizational structure for surveillance, epidemiology, the public health laboratory, and IT. Public health can also foster partnerships with payers, including Medicaid, and community programs such as worksite wellness.

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## **STATE STD PROGRAMS: LESSONS ABOUT PARTNERSHIPS**

**ARKANSAS.** Texarkana, a city that crosses the Arkansas and Texas state lines, experienced a 10-fold increase in primary syphilis. Individual providers were seeing cases, but they did not see the big picture and could not get the word out. The Arkansas Department of Health partnered with Texas and did public service announcements, targeted screening, and analysis of populations at risk. These activities were beyond the scope of primary care and highlighted the gaps in the primary care workforce. Arkansas is a rural state where some counties have only one physician. Health centers have high turnover and staffing gaps. County health departments are the traditional STD providers, and academic providers refer patients to the health departments. Little STD expertise exists outside of the health department. Integration with primary care will require increased capacity for training providers and strengthened communication networks to share information.

**GEORGIA.** Georgia is working to integrate its HIV and STD programs. The health department wants to decrease the delineation between HIV and STD care, such as HIV specimens being couriered to labs while STD specimens at the same location are left behind. There is also concern that the data will remain segregated. The health department added linkage to care to the STD database and is cross-matching the HIV and STD databases to identify patients affected by both diseases. Because the state health department does not have the infrastructure to look at every case, it works to increase awareness. It also granted permission for the call line to give STD and HIV prevention messages at the same time.

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## **Payment**

### **Overview**

Third party billing efforts are underway in many public health programs, but a more enterprise-wide system with a strong infrastructure that can generate revenue is needed. In the 2012 ASTHO Fee for Service Revenue Generation Survey, 28 state health departments reported they were billing. Twenty-one states reported that they have



electronic billing, which makes billing more efficient and sustainable. Currently, many states have multiple billing systems, whether for immunizations, STD, maternal and child health, or the laboratory. Given the costs and complexities of setting up these systems and making them effective, it will be difficult to sustain them. In public health, siloed systems often do not work. States should consider having global contracts with billers and work with national vendors for processing payments.

Another challenge is billing codes, which are set by the American Medical Association and do not always line up with the services public health provides. CDC is helping public health labs bill for screening and provide specialty testing. In addition, CDC's STD-related

Reproductive Health, Prevention, Training, and Technical Assistance Centers are conducting a billing and reimbursement needs assessment to inform future technical assistance. State health departments have limited expertise around billing and staff will need training to bill. Billing is also a huge culture change for public health because it requires collecting for services that were traditionally provided for free as a public service. States need time to be proactive, invest in this transition, and implement changes in a thoughtful, systematic way.

Public health needs to consider appropriate models of payment. There is general discontent with the fee-for-service system: How would public health respond to the variable cash flow? Are there examples of per capita payments from Medicaid or insurance allocations? Health officials could explore bulk payments, which would entail assessing the insurance companies and allocating that as a bulk payment to health departments. This could be framed as a benefit to insurance plans if they can apply health department activities toward their Healthcare Effectiveness Data and Information Set measures. States should also develop expertise on contract negotiations to avoid weak contracts that can harm state programs.

Depending on structures, funds from billing may go to the general fund, to the state program, or to the county/local government. The Washington State Department of Health did an assessment of local activity and found there is no centralized billing effort. The health department is looking to coordinate efforts and hold a webinar for local health departments. In Wisconsin, billing conversations at the local level are being driven by the recent change in 317 funds, which requires billing for insured clients. The small, rural health departments cannot afford to set up a billing system and are asking the state to build a system, either through the immunization registry or a clearinghouse. The lack of sustainable funding at the state level for such a system is a challenge. In Georgia, the counties are autonomous and there are many ways that the local health departments bill (e.g., consolidated billing, different accounting systems). Some systems have limitations, and the state is encouraging districts to coordinate efforts. One Georgia district that billed during school-based influenza clinics experienced problems with data input and 50 percent of the claims were unsuccessful.

### Payment for STD Prevention

Education and outreach for STD prevention are core services, but a number of states lack state funding for their STD programs. As federal grants decline, billing needs to increase to generate resources to maintain core services. States can use billing to make a good faith effort to continue STD programs. Health department programs are billing for some services, such as family planning, but STD programs are isolated and not always aware of these efforts. The capitated payment model could be a good fit for STD programs because it mitigates confidentiality concerns (i.e. explanation of benefits). Even as drug-resistant gonorrhea becomes more of a

public health issue, there may be issues around billing for susceptibility testing because it remains unclear if insurance will pay for the following situations: both a NAAT and culture at the same time; follow-up susceptibility testing for failed treatment; or using a particular lab for susceptibility testing.

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## **STATE STD PROGRAMS: LESSONS ABOUT PAYMENT**

**EXPEDITED PARTNER THERAPY.** Some services pose particular challenges to billing, such as expedited partner therapy (EPT). Billing for EPT under the index patient could be a viable strategy, given that treating the partner to prevent reinfection is part of proper treatment. However, some payers may consider this billing fraud. Arkansas has encountered this obstacle in conversations with Medicaid, Medicare, Arkansas Blue Cross and Blue Shield, and QualChoice Arkansas. Some jurisdictions are billing for EPT as a result of negotiating with each payer. This is not a 50-state issue, though, because there is a level of granularity with each insurer. Pricing for medications, particularly the lack of access to 340B-supported medications for EPT, is another challenge. Each state’s drug formulary varies as well.

CDC is exploring these issues with CMS and other payers (e.g., America’s Health Insurance Plans). Originally, insurance carriers focused on EPT as potentially fraudulent billing because one person’s insurance plan was used to pay for medication for a second person. However, in discussions with insurers, EPT should be framed as a preventive service to the index case. Partners of the index patient will re-infect the patient and drive up their costs, so it is cost effective to cover the partner’s treatment even if they are not on the same insurance plan.

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## **Workforce**

### **Overview**

The healthcare provider workforce and availability of infectious disease specialists varies across communities. In working with providers, public health needs to improve the reach of treatment guidelines, develop the primary care workforce (e.g., sexual history taking), and address confidentiality concerns (e.g., explanation of benefits). Confidentiality concerns now extend to young adults, as they may be on their parents’ insurance until their 27<sup>th</sup> birthdays.

The Council of State and Territorial Epidemiologists (CSTE) board has identified public health informatics as the largest workforce gap, and public health-healthcare integration cannot be realized without it. With [Meaningful Use \(MU\)](#), the clinical side is eligible for incentive payments, but public health is not. CDC’s public health informatics fellowship program and others like it need to be expanded. There is a lack of understanding on the public health side about the business rules of electronic health records (EHRs). State health agency staff need cross training in informatics and surveillance, but states do not have the capacity to provide this training. The Public Health Informatics Institute and CSTE are proposing training for mid-level public health professionals. The CDC professional development program provides basic public health informatics training, and a number of universities offer the 10x10 health informatics distance learning program.

### **Workforce for STD Prevention**

The public health accreditation process represents an opportunity to address workforce challenges that STD directors may not be thinking about. The Public Health Accreditation Board standards require maintaining a competent public health workforce, including a sufficient number of qualified public health workers and organizational





and individual development and trainings. As ground-level investigators, DIS represent essential workforce capacity of the STD prevention network. Their unique skills allow them to forge the internal and external partnerships necessary for successful integration. DIS should be care coordinators because they can link people to care and build on their relationships with patients. Public health has an interest in defining the DIS role, both in terms of what it is now and what it should be in the future. For example, how does the role compare with that of community health workers? If public health expands the role of DIS, it will require additional training. In New York, DIS were integrated with the HIV counseling and testing program staff, with cross-training for both.

In the past, liability was less of a problem and DIS were doing much more (e.g., transporting patients, reading test results), but this capacity eroded. The National Coalition of STD Directors (NCSDD) tracks declining public health infrastructure and documented a 21 percent decline in numbers of DIS from 1999 to 2009. Securing funding for DIS can be challenging, and with ongoing budget restraints STD programs will be less likely to be able to fund DIS. Programs need to determine: What are the billable skills that DIS provide and are there different (important) skills that are not billable? One state questioned whether public health was getting a return on its investment in DIS. Although some benefits of DIS may be difficult to measure (e.g., preventing infections through their role in acute HIV and primary syphilis outbreak response), metrics for success are needed and there is interest in national certification of DIS. One site provides funds to embed DIS in a facility, which has been successful. In some areas, such as Los Angeles and Chicago, DIS are being co-located in non-health department clinical settings.

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## **STATE STD PROGRAMS: LESSONS ABOUT WORKFORCE**

**NORTH DAKOTA.** The oil boom has generated jobs and billions of dollars in revenue, but it has taxed North Dakota's public health and primary care system infrastructure. During the first 10 years of the boom (i.e. drilling phase), many of the workers have been young people who are transient and stay in temporary housing. Due to this new population, the region has seen increased prostitution, substance abuse, and STD rates. In all western counties, the chlamydia rate increased from 300/100,000 in 2008 to 470/100,000 to 2012. In one county, the rate increased from 190 to 600/100,000 in the same time period.

The North Dakota Department of Health is using integration to address the state's rising STD rates by working with the private sector and other partners. For example, in addition to the department's immunization campaigns, it is working with the schools of medicine and nursing to deal with the primary care workforce shortages. Worksite wellness programs provide easy opportunities for sustainable integration. Moreover, the health department is working with training community chaplains to address the oil workers' mental health issues, which can contribute to behaviors that increase STD rates. Finally, the department is also working toward sustainable EMS and examining billing services for community paramedics.

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# Surveillance

## Overview

Modernizing surveillance systems is expensive up front, and states need to be forward-thinking about ongoing development and maintenance costs. Some states are integrating systems across infections (e.g., eHARS, STD MIS). In other states, there are statutory protections that prevent integration, such as confidentiality requirements for HIV data. States often rely on free software or software developed for other purposes (e.g., immunization information systems). Some states have centralized their IT support across government agencies, and issues other than public health may take priority.

The public health surveillance system needs to interface with health information exchanges (HIE) and electronic medical records (EMR), which allow for population health monitoring, including movement between sites. Without this integration, public health must rely on their staff to function as “human data cables” and crosswalk data from different systems. There may be challenges in accessing HIEs, as health-care systems may view public health as “outside” and perceive data as a one-way system. Health departments would benefit from the ability to extract data from HIEs. There is also a need for two-way integration (push and pull) of systems, which may be achieved by building on well-resourced systems such as immunization information systems.



As discussed above (*Workforce*), health department staff will need new skills to maximize the benefit of health information technology (HIT). Public health, when it has access, is mostly using HIEs like an EMR to ascertain whether something happened, but HIEs could be used to generate data for public health decision making (e.g., screening penetration). HIT is expensive, staff intensive, and skill set intensive. It opens up new information for public health, but health departments may need to evaluate which traditional activities can be discontinued to make room for these new technologies.

## Surveillance for STD Prevention

STD surveillance is needed to identify at-risk populations and target services, but current surveillance is limited by incomplete diagnosis and reporting, and therefore functions more like diagnostic surveillance. Changes in diagnostics, such as point of care testing and a shift away from using culture for STD diagnosis, will likely affect case definitions and reporting. State health departments need well-developed lab-based reporting, communicable disease systems that accommodate STD data, and integrated systems (e.g., for partner management, to identify co-infection). HIT and MU provide opportunities for electronic case-based reporting, which would allow for enhanced case management, whereby public health could review what treatments patients were receiving.

Thus far, MU has incentivized reporting to the health department, but has not created systems for health departments to receive and store data. States need funding to implement MU. The public health reporting initiative, which may be part of MU phase 3, addresses automated reporting from the electronic health record. This will be especially important for STD surveillance, as most STDs are captured in lab reports. Working with a business-ready lab is a viable and lower-cost strategy for electronic laboratory reporting (ELR) because the lab can start sending reports. However, public health surveillance systems must be able to receive standardized



messages (e.g., HL-7) from the private labs and customization may be necessary for interoperability with various laboratory information systems. ELR is by nature incomplete because the lab does not necessarily collect data that public health needs (e.g., age, race/ethnicity, workplace). In addition, the volume of reports often requires significant time for processing and follow-up. For example, in Wisconsin, electronic reports go out to local health departments daily but it can be challenging to apply the data. Thus, it may be better to obtain lab reports from the EHR.

Public health needs to critically examine its activities, reduce or discontinue those without public health yield, and focus on areas of need. For example, public health may be able to move away from latent syphilis case follow-up and shift to gonorrhea resistance work. Antimicrobial susceptibility results may be used to prioritize patients for follow-up. Antimicrobial resistant gonorrhea poses unique challenges for STD surveillance. Molecular diagnostic tests offer value for surveillance, and CSTE has made changes to the surveillance case definitions that recognize this testing. However, the absence of culture as a routine clinical diagnostic test makes surveillance for cephalosporin-resistant gonorrhea challenging. Deep concern exists about the need to prepare for this threat, but most states are unfunded, and some states with high rates of gonorrhea do not have readily available susceptibility testing.

Arkansas has a centralized lab that performs STD culture, which requires providers to make arrangements for culture if they have a suspected treatment failure (the lab ships out the collection kit and the provider asks the patient to come back and collect the specimen). Distinguishing between resistance and reinfection will likely be challenging. Washington state and a Hawaii military base have adopted a room temperature culture kit, which may be useful technology to support culture capacity. Antimicrobial susceptibility testing data can be used for clinical management, and if collected as surveillance data can provide an understanding of local resistance patterns which would be most beneficial.

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## **STATE STD PROGRAMS: LESSONS ABOUT SURVEILLANCE**

**NEW YORK.** New York has extensive and timely lab-based electronic reporting of diagnostic test results for gonorrhea. County health departments operate STD clinics, some of which perform gonococcal cultures on all patients tested for gonorrhea. Others use nucleic acid amplification testing to diagnose gonorrhea and have no local capacity for culture. The state public health lab offers culture and antimicrobial sensitivity testing (AST) as needed for epidemiologic or clinical support; however, the shipping of test kits for culture results in delayed diagnostic evaluation. The state laboratory conducted a survey of laboratories providing testing for NYS physicians to assess capacity for culture and AST in commercial and public health laboratories. The State Department of Health conducts surveillance for gonorrhea resistance in collaboration with the Erie County Public Health Laboratory and encourages commercial labs conducting AST to voluntarily report results. Even so, the capacity to monitor for gonorrhea with decreased susceptibility to cephalosporins is limited. State and local health departments maintain capacity for partner services and can use timely surveillance information on susceptibility to assist with clinical care and prioritize partner interventions.

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## Conclusion

### Next Steps for Public Health Leadership

Public health leadership can support STD programs in the four areas of transformation: partnerships, payment, workforce, and surveillance. Many of these programmatic challenges can be addressed as state health officials advance broader efforts to integrate public health and primary care. Leadership can consider the unique challenges for STD programs as they engage in dialogue with community health centers, other providers, payers, universities, and policymakers. ASTHO recommends that health officials consider the following strategies:

**PARTNERSHIPS:** Strengthen internal and external collaboration to ensure high-quality, culturally-appropriate STD services are available, with strong links to DIS and partner services.

**PAYMENT:** Advance enterprise-wide third party billing for public health services, considering the necessary changes in technology and culture.

**WORKFORCE:** Maximize opportunities such as training, certification, public health accreditation, and redefining DIS to address workforce gaps.

**SURVEILLANCE:** Modernize STD surveillance to harness new technology (e.g., HIE, ELR) and changes in diagnostics and case definitions, with an aim to better target services to at-risk populations.

Public health leadership can also disseminate and implement tools, some of which may exist in their own programs and others that require development at the national level. Meeting participants identified a need for the following tools:

#### PARTNERSHIPS

- Strategies to cover the safety net.
- Strategies and funding flexibility to adopt the functional (not disease-specific) model.
- Fact sheet covering expectations, responsibilities, and reimbursement for STD clinics.
- Template provider letters to communicate treatment guidelines.
- Clinical decision support compatible with treatment guidelines.
- Treatment guidelines that require reflex testing in the emergency department (i.e. if an STD test is ordered, then the patient will also receive an HIV test).

#### PAYMENT

- Standards for third party billing.
- Billing for DIS services.
- Centralized clearinghouses that can provide billing systems for health departments.
- Best practices for contract negotiations.
- Across the board determinations for how much insurers will pay, rather than each health department negotiating for in-network provider status.
- Guidance around STD clinics becoming/being delegated as federally qualified health centers to enhance billing.
- Assistance, such as data sources, to characterize the population that cannot pay for services.

## WORKFORCE

- Standards or certification for DIS.
- Expanded public health informatics fellowship program.
- Strategies CDC can use to help states leverage dollars (e.g., to address freezes, include travel/staffing requirements in federal grants).
- Menu of options for consultation from CDC (e.g., what services have been provided to states).
- Partner with the CDC Field Services and Evaluation Branch to identify skills and needs of field staff.

## SURVEILLANCE

- A five-year surveillance plan to guide states, so that efforts and resources to modernize will be dedicated toward long-term use.
- Best practices: surveillance systems, MOUs/agreements, legal aspects, and models.
- Performance measures and long-term standards (tied to funding for IT vendors).
- Algorithm for automated de-duplication and receipt of electronic lab reports from large labs (e.g., Quest) and tools for working with hospital labs.
- Technical assistance on HIT, including sample code, state experiences, and pros/cons of systems.

Policy can also be strategy to transform STD programs, as demonstrated by New York's experience (below). The proposed amendments to New York's STD law address some of the barriers to effective payment and surveillance.

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### **STATE STD PROGRAMS: LESSONS ABOUT POLICY**

**NEW YORK.** New York's STD law (Article 23) dates from the early 20th century, with many amendments incorporated over the years. When the STD and HIV programs integrated in 2010, the health department began to pursue modifications to eliminate archaic language and reflect current public health needs and practice. The desired changes are included in the governor's budget bill for 2013-2014.

The law required each local health department to provide for the "free diagnosis and treatment" of STDs. To allow billing but preserve the options of treatment without cost and/or greater confidentiality through the avoidance of private insurer benefit statements, the proposed revisions call for health departments to seek third party reimbursement provided that the coverage is not required as a condition for care. The proposal eliminates language granting the health department authority to prosecute persons or require treatment because such language may increase stigma without adding to the broad public health powers for disease control that already exist in the communicable disease statute. Other provisions include the permanent adoption of EPT for chlamydia and broadening the permissible uses of surveillance data within state and local health departments to include co-morbidity assessment.

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## Future Opportunities

ASTHO will support further development of tools and strategies for public health leadership through participation in the National Partners Initiative on Public Health and Primary Care Integration for STD Prevention. This initiative is a collaboration of ASTHO, CDC, the National Association of County and City Health Officials, the National Association of Community Health Centers, and NCSH. The purpose is to bring together partners from public health and primary care to identify, discuss, and examine strategies for integrating public health and primary care in the STD prevention setting and learn from health department and primary care leadership how to better support and align prevention, care, and treatment in this changing environment of healthcare reform. The resulting reports will be available in 2014.

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